## West Virginia Department of Environmental Protection Division of Air Quality

# **Fact Sheet**



### For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-03300014-2006 Application Received: January 7, 2002 Plant Identification Number: 03300014 Permittee: Dominion Transmission, Inc Facility Name: Law Compressor Station Mailing Address: 445 West Main Street

Physical Location: Good Hope, Harrison County, West Virginia

UTM Coordinates: 545.88 km Easting • 4335.35 km Northing • Zone 17

Directions: From Clarksburg take Route 19 South thru Good Hope for 11 miles.

Turn right across iron bridge onto Two Lick Road. Go 1.1 miles then

turn right thru gate. Go 0.3 miles to station at top of hill.

Clarksburg, WV 26301

#### **Facility Description**

Law Compressor Station is a natural gas transmission facilty covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of two (2) 660 HP natural gas fired reciprocating engines, one (1) dehydrator reboiler, one (1) dehydration unit with a flare, one (1) air compressor, and seven (7) storage tanks of various sizes.

#### **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]				
Criteria Pollutants	<b>Potential Emissions</b>	2004 Actual Emissions		
Carbon Monoxide (CO)	67.34	33.36		
Nitrogen Oxides (NO <sub>X</sub> )	259.17	224.79		
Particulate Matter (PM <sub>10</sub> )	0.58	0.18		
Total Particulate Matter (TSP)	1.14	0.36		
Sulfur Dioxide (SO <sub>2</sub> )	0.0705	0.02		
Volatile Organic Compounds (VOC)	60.57	38.96		

 $PM_{10}$  is a component of TSP.

<b>Hazardous Air Pollutants</b>	Potential Emissions	2004 Actual Emissions
Total HAPs*	9.58	5.24

Some of the above HAPs may be counted as PM or VOCs.

#### **Title V Program Applicability Basis**

This facility has the potential to emit 259.17 tons of NOx. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission,Inc is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Opacity Requirements for boilers
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur requirements for fuel burned
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Construction
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Control fugitive particulate matter

<sup>\*</sup> HAPs are not speciated because no applicability was triggered.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
N/A		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAO's website.

#### **Determinations and Justifications**

Since the last modification of the existing permit, additional MRR (Monitoring, recordkeeping and reporting) has been added regarding the glycol dehydration system.

Calculations of  $SO_2$  emissions using the FERC limit for total sulfur of 20 grains/ $100ft^3$  along with stoichiometric conversions from grains of total sulfur/ $100 ft^3$  in the fuel to dry standard cubic feet of  $SO_2$  per MMBtu and equation 19-1 of EPA Method 19 indicate that emissions from the engines are only a small fraction (<5%) of the 2000 ppm<sub>v</sub> limit established by 45 CSR 10.

Calculations of particulate matter emissions using AP-42 factors for Natural Gas Combustion and Soot Formation at Flares (Sections 1.4-3 and 13.5-1, respectively) indicate that emissions from the flare are only a small fraction (<10%) of the mass limit established by 45CSR6. As a result of this finding and due to the nature of this control device, the visual emissions performance tests as per Section 5.4.1 of the permit may be used as an indicator of compliance with 45CSR6 requirements and shall be sufficient for compliance certification purposes.

According to 45 CSR §2-11, RBR01 is exempt from MRR (Monitoring, recordkeeping and reporting) requirements because RBR01's heat input is less than ten (10) million B.T.U's per hour.

Since the last modification of this permit WVDEP has determined that 45CSR10 is not applicable to the engines.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 64 - Engines do not have any control; Glycol Dehydration unit is not a major source of HAPs. Therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

40 C.F.R § 60.18 – Flare is used only to control the odor. Even without flare the facility is not a major source of HAPs. Therefore, 40 C.F.R § 60.18 is not applicable.

#### **Request for Variances or Alternatives**

None

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: June 17, 2006 Ending Date: July 17, 2006

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

#### **Response to Comments (Statement of Basis)**

- 1. Due to company's comment first sentence of Section 5.2.4 in the permit was changed from "At a minimum of once per year, sample and analyze the inlet gas stream utilizing gas chromatography for the presence of H<sub>2</sub>S" to "At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of H<sub>2</sub>S".
  - By indicating the stream to be sampled is the inlet to the station the condition is consistent with Section 5.2.3 with respect to sampling location.
- 2. Due to company's comment the following potential emissions were changed in the fact sheet: VOC 60.57 Tons/Year instead of 66.12 Tons/Year and HAPs 9.58 Tons/Year from 11.10 Tons/Year. The changes in potential emissions are due to a recalculation of the dehydration unit emissions using GLYCalc incorporating current operating parameters of the system.